GOVERNOR'S RURAL JOBS COUNCIL



REPORT TO THE GOVERNOR

June 12, 2013

http://www.governor.virginia.gov/RuralJobsCouncil/

Dear Governor McDonnell,

I am pleased to submit the final report of the Governor's Rural Jobs Council. Over the past three and a half years we have worked hard to create jobs in Virginia. We have experienced tremendous success, closing 1,167 economic development deals, creating 171,300 net new jobs and reducing our state's unemployment rate to 5.2%, which is well below regional and national averages.

These positive economic development results have been one of the major accomplishments of the McDonnell/Bolling administration, and our Commonwealth is stronger today because of these successes. Despite this progress, we know there is still important work to accomplish through the remainder of the term. The Rural Jobs Council's efforts over the last several months are further indication that we intend to sprint to the finish.

The recommendations contained in the report are focused on strategies to improve K-12 education and the workforce pipeline; develop a comprehensive economic and infrastructure plan for rural Virginia; and development policies that encourage and expand Virginia's entrepreneurial foundation.

Throughout the process, members of the Council researched, developed and exchanged a wide array of innovative ideas, including the Rural Virginia Horseshoe Initiative, a promising community college based initiative that has recently emerged to drive job creation in Rural Virginia through full-time career coaches. The Rural Virginia Horseshoe Initiative is an example of the power of public-private partnerships to drive job creation and workforce development.

I want to thank the members of the Council who worked hard to help develop these recommendations. They include legislators and leaders in business, manufacturing, agriculture and healthcare. I also want to reiterate my thanks to you for your leadership in providing us with this forum in which to discuss these kinds of important issues. I look forward to seeing what results come from these recommendations in the future.

Sincerely,

LIEUTENANT GOVERNOR BILL BOLLING

Members of the Governor's Rural Jobs Council

Chair: Lieutenant Governor Bill Bolling

Vice Chairs: Secretary Jim Cheng

Secretary Todd Haymore

Members: Shannon Blevins, Director of Economic Development, UVA at Wise, Wise

County

David Brash, Senior Vice President of Business Development and Rural Strategy,

Wellmont Health System, Lebanon Delegate Kathy Byron, Lynchburg

Elizabeth Crowther, President, Rappahannock Community College, Saluda

Jeff Edwards, CEO, Southside Electric Cooperative, Crewe

Katie Frazier, President, Virginia Agribusiness Council, Richmond

Timothy Heydon, CEO, Shenandoah Growers, Harrisonburg Rebecca Hough, Co-Founder and CEO, Evatran, Wytheville

Thomas Hudson, President, Virginia Coal Association, Richmond

Delegate Danny Marshall, Danville

Ned Massee, Chairman, Virginia Chamber of Commerce, Richmond

Delegate Don Merricks, Pittsylvania County

Phil Miskovic, Councilman, Crewe

Martha Moore, Vice President for Government Affairs, Virginia Farm Bureau

Federation, Richmond

Delegate Israel O'Quinn, Abingdon

Bill Parr, Parr Properties, Cape Charles

Senator Phil Puckett, Tazewell

Delegate Margaret Ransone, Kinsale

Nicole Riley, State Director, National Federation of Independent Business,

Richmond

Michael Robinson, Superintendent, Smyth County Public Schools, Smyth County

Senator Frank Ruff, Clarksville

Dr. Nettie Simon-Owens, Director of Workforce Services, Southern Virginia

Higher Education Center, South Boston

Brett Vassey, President and CEO, Virginia Manufacturers Association, Richmond

Senator William Wampler, Executive Director, New College Institute,

Martinsville

Delegate Onzlee Ware, Roanoke

Staff to the Governor's Rural Jobs Council

Staff Director

Ibbie Hedrick Deputy Chief of Staff Office of Lieutenant Governor Bolling

Policy Director

Generra Peck Assistant Director of Legislative Affairs Office of Governor Bob McDonnell

Infrastructure Advisor

Liz Povar Vice President of Business Expansion Virginia Economic Development Partnership

Infrastructure Advisor

Bill Shelton Director Department of Housing and Community Development

Workforce/K12 Advisor

Elizabeth Creamer Director of Education and Workforce Development Office of Governor Bob McDonnell

Entrepreneurship Advisor

Chad Cole Policy Assistant Office of Governor Bob McDonnell

Staff Assistant

Micala MacRae Executive Assistant to Commerce and Trade Office of Governor Bob McDonnell

Governor's Rural Jobs Council Report Executive Summary

Governor McDonnell issued Executive Order 57 on January 2, 2013, establishing the Rural Jobs Council. He named Lieutenant Governor Bolling, Virginia's Chief Jobs Creation Officer, as Chair of the Council. Secretary of Commerce and Trade Jim Cheng and Secretary of Agriculture and Forestry Todd Haymore were named as Co-Vice Chairs for the group.

The Council's purpose was to ensure a continued focus on rural Virginia. Since the beginning of the term, the administration has been committed to jobs and economic development and rural development has been a key part of those efforts. This Council helped by continuing to look for ways to improve the business environment and quality of life and leave a legacy of dedication to rural Virginia that will benefit the Commonwealth for years to come.

The membership of the Council consisted of legislators and leaders in the business, manufacturing, agriculture, and healthcare industries. The group's goal was to put forth recommendations to address the challenges to economic growth in rural Virginia. Since the Council began its work several months ago, members, staff and expert agency staff worked diligently to identify key initial recommendations that would be achievable in scope.

The Council's key recommendations are fully detailed in individual sections of the report. They include:

- Promoting regional capacity building
- Improving health care outcomes
- Supporting efforts to increase access to capital in rural areas
- Expanding access to dual-enrollment, particularly in Science, Technology, Engineering, Mathematics, and Health (STEM-H)
- Strengthening pipeline and credentials of rural STEM-H teachers
- Sustaining and expanding use of annual Report Card on Workforce Development in Virginia
- Conducting public awareness campaign for middle skills jobs and the Career Readiness Certificate (CRC)
- Disseminating regional workforce solutions that address skills gap in key industry sectors
- Guaranteeing that participants of Virginia's Career and Technical Education (CTE) and Workforce Programs have opportunities to earn a work readiness credential
- Implementing "Rural Entrepreneurial Community" program for rural Virginia to promote localities that have maintained healthy entrepreneurial climates
- Developing regional strategies to promote cooperative efforts that foster entrepreneurship
- Developing educational entrepreneurship package to include the selection of a site in rural Virginia for the future Governor's School for Entrepreneurship
- Reviewing new technology applications for surface-influenced public well water treatment systems

Entrepreneurship

The Entrepreneurship Subcommittee of the Governor's Rural Jobs Council considered many ways in which entrepreneurial activity and a culture of innovation could be encouraged in rural Virginia. There were four key areas in which the subcommittee determined policy recommendations were appropriate, including: (1) the implementation of a "Rural Entrepreneurial Community" program for rural Virginia to promote localities that have maintained healthy entrepreneurial climates, (2) the development of regional strategies to promote cooperative efforts that foster entrepreneurship, (3) the development of an educational entrepreneurship policy to include the inclusion of a site in rural Virginia for the future Governor's School for Entrepreneurship, and (4) specific short-term recommendations regarding the review of new technology applications for surface-influenced public well water treatment systems. The recommendations are outlined in the following action ideas along with further details on their implementation.

Action Item #1: Rural Entrepreneurial Communities

Problem:

While many rural communities may identify themselves as having the eco-system critical for entrepreneurs to grow and flourish, there is no consistent measurement or designation that communities can strive to achieve in order to set them apart as an entrepreneurially focused community.

Key Players:

Government, Entrepreneurs, Corporations, Investors, Academic Institutions, Service Providers, NGOs & Foundations

How it works:

Implement a "Rural Entrepreneurial Community" program for Rural Virginia to promote communities with a vibrant entrepreneurial eco-system.

No secret formula exists for communities to transform themselves into a vibrant entrepreneurial hub. However, there are several strategies localities can implement to build the right eco-system for generating and sustaining successful entrepreneurial ventures. From providing robust internet access for residents and businesses within its borders to hosting Opportunity Summits to help citizens see business needs within their community, localities can make a positive impact on creating a culture of entrepreneurship.

The Commonwealth may also encourage communities to take positive steps in boosting entrepreneurship support by developing an official recognition program – Partner Rural Entrepreneurship Community. Entrepreneurial Community Tool Kits provide a roadmap for communities and a series of workshops tailored to government officials and community leaders

motivated by sharing results of a business-friendly climate and provide helpful information for communities to use as they develop effective strategies that meet their needs.

Highlights:

Opportunity Summits expose the region's citizens to business needs within their communities. Do-It-Yourself Summit packages designed specifically for Institutions of Higher Education (IHE) within rural regions will provide a roadmap to promote entrepreneurship at a large-scale level. These summits serve promotional purposes for the universities, which will operate as the regional hubs for such events.

Rural Economic Development Toolkit tailored for local leaders with limited human resources and newly-elected local officials. Elected officials in rural areas may not have had substantial exposure to successful economic development initiatives, and may have limited knowledge of the resources available at the state level. Often times in an effort to preserve longstanding local traditions and culture, rural communities fight against institutional changes resulting in economic disadvantage and stunting economic growth. The toolkit will acknowledge this tendency and provide differentiated resources for rural areas that require specific and targeted approaches to achieve desirable economic results.

Economic Gardening Workshops provided through a partnership with a statewide association will highlight case studies of what can happen when a town, city, or county creates a business-friendly climate that attracts and supports an entrepreneurial venture. These workshops would encourage government officials to appeal to entrepreneurs with their policies.

Entrepreneurial Mentoring Programs strengthen existing businesses by supporting the "high school to work" program. Legislation in 2013 created this program to encourage high school students gaining real world experience

Examples:

Certified Entrepreneurial Communities

North Carolina - http://www.prweb.com/releases/2008/10/prweb1516664.htm

AdvantageWest Economic Development Group, a 23 county economic development organization established a rigorous five-step process known as the Certified Entrepreneurial Community program. It is designed to assist community leaders in creating a business friendly climate by improving access to capital for entrepreneurs and providing an exceptional support system. Haywood County, located in the mountains of Western North Carolina was the first locality awarded the designation in the fall of 2008. This region of North Carolina has experienced a higher rate of entrepreneurial activity than the rest of the state.

Rogers State University - http://www.rsu.edu/innovation/entrepreneur.asp

Entrepreneurial Ready Community Certification Program was created by Rogers State University to recognize communities who provide support services to small businesses and local entrepreneurs. The program is based upon economic gardening principles pioneered by Chris

Gibbons in the City of Littleton, Colorado as they transformed themselves into a vibrant entrepreneurial hub.

Opportunity Summits

http://www.empactsummit.com/about.php

This Summit held at the US Chamber of Commerce, Capitol Hill, and White House included over 300 delegates. The mission is to spark conversations that facilitate relationship building in order to forge and strengthen bonds in both local and global entrepreneurship ecosystems thus making entrepreneurship a viable option.

http://rockymountainentrepreneurialsummit.com/

The Rocky Mountain Entrepreneurial Summit is hosted semi-annually in Denver, Colorado. This summit is dedicated toward spurring innovation, job creation, and a better quality of life. The Summit seeks, encourages, supports, and catapults entrepreneurs in the Rocky Mountain Region.

Tool Kits

http://www.joe.org/joe/2002october/tt5.php

Oklahoma Cooperative Extension provides economic development educations a toolkit targeting two categories: educational programming and technical assistance. The tools work best when used together however, they can be used independently and can significantly impact rural communities dedicated to the process of economic development.

http://www.nist.gov/ineap/upload/RI SmallBizToolkit-2012-Web.pdf

The National League of Cities offers toolkits to local leaders which provide guidance on constructive action local officials can take to foster an entrepreneurial environment. Common themes of leadership, communication and partnerships are themes found within this toolkit which is applicable to both large and small cities.

Action Item #2: Regional Strategy to Grow Entrepreneurship

Problem:

Many rural localities, regions and institutions utilize a strategic planning process to chart a course for the future. Often these strategic plans do not consider the critical role of a robust entrepreneurial culture for a region's economic growth.

Key Players:

Government, Entrepreneurs, Business Leaders, Academic Institutions, Regional Planning Organizations, Engaged Citizens

How it works:

In partnership with the "Rural Entrepreneurial Communities" recommendation, rural regions should consider the potential benefit from a regional entrepreneurship strategy. Regions should consider strategies to grow entrepreneurship through:

1. Strategy Meetings

Strategic planning groups should engage thought leaders early to determine the scope and size of such a planning effort. The organizational leadership should provide the framework and support, but not be the only source of content.

2. Gap Analysis

Each region or community has existing resources which make up the eco-system needed for entrepreneurial ventures to thrive. However, gaps in these resources will inevitably exist, especially in rural regions. A thorough gap analysis will provide a foundation for strategic planning and identify where the region should focus attention to fill existing gaps.

3. Public Engagement

Public input continues to be one of the most critical elements of a successful regional strategy. The strategic planning groups should be sure to engage the public in person and through electronic comment tools.

4. Strategy ventures

Leaders from regions who are seeking to learn from other successful models should dedicate time to visit a peer region to learn about their strategy.

Examples:

Blueprint for Entrepreneurial Growth and Economic Prosperity in Southwest Virginia

Appalachian Prosperity Project – http://approject.org/initiatives/appalachian-ventures.html
The Blueprint for Entrepreneurial Growth and Economic Prosperity is a regional strategy to grow entrepreneurship and innovation in southwest Virginia. It is a key focus of the Appalachian Prosperity Project, a collaborative initiative resulting from the work done in partnership between the University of Virginia, The University of Virginia's College at Wise and the Virginia Coalfield Coalition. Most importantly, the Entrepreneurship Blueprint is a strategy born of the region for the region and is flexible enough to adapt to the ever changing needs of a region. The strategy was developed with a broad stakeholder group of thought leaders who are committed to its success.

Inter-city Visits / Inter-Region Visits
Greater Richmond Chamber of Commerce -www.grcc.com/View.aspx?page=events/list/intercity_visit

Each year, the Greater Richmond Chamber of Commerce sponsors an exciting trip to a comparable region in the nation to exchange ideas and best practices. The InterCity visit (ICV) has become one of the GRCC's most sought after programs because it helps participants look at the Richmond region through new eyes.

Rural communities could partner the ICV model with their strategic planning process to better inform and prepare stakeholder input.

Action Item #3: Educational Entrepreneurship Programs

Problem:

Virginia Governor's Schools provide skilled students the opportunity to participate in academically and artistically challenging programs beyond those offered in their home school districts. These schools serve more than 7,500 students in various parts of the state. Unfortunately, there is currently no program available for students to study entrepreneurship.

Key Players:

Governor's Office, Department of Education, Local Governments, Academic Institutions, Entrepreneurs, Corporations.

How it Works:

Entrepreneurship has grown at a rapid pace in recent years. In an increasingly globalized world, entrepreneurs with education and ambition have found opportunities to drive emerging markets with revolutionary products and services. But as businesses and individuals have gravitated towards the ever-expanding urban centers, rural areas have been slow to develop a culture of entrepreneurship.

In recent years, the number of universities in the US that offer education and training in entrepreneurship has skyrocketed to roughly 1,600. Although Virginia, like several other states, has begun to see the effects of this cultural shift trickle down to K-12 education, the following are recommended specific initiatives to expedite the adoption of early entrepreneurship education programs.

Highlights:

Inclusion of a rural Virginia site for the future location of the Governor's School for Entrepreneurship

Virginia Governor's Schools provide skilled students the opportunity to participate in academically and artistically challenging programs beyond those offered in their home school districts. These schools serve more than 7,500 students in various parts of the state. Unfortunately, there is currently no program available for students to study entrepreneurship. The Subcommittee recommends selecting a site in rural Virginia as the location of the Governor's School for Entrepreneurship. This school, either a summer program or a full-year curriculum, could be modeled off of successful programs implemented in several other states.

Endorsement of the High School to Work Program

During the 2013 legislative session, Governor McDonnell support legislation sponsored by Senator Dick Black and Delegate David Ramadan directing the Board of Education to develop guidelines for the establishment of High School to Work Partnerships between public high schools and local businesses to create apprenticeships, internships, and job shadow programs in a variety of trades and skilled positions. Programs like this one have been used successfully across the country to give job-seeking high school students a head start towards employment. For

students with ambitions of starting and running their own company, this training proves invaluable to their future.

The subcommittee encourages the steps the Governor, Senator Black and Delegate Ramadan, and members of the General Assembly have taken to advance this initiative.

Case Studies:

Pennsylvania's School for Global Entrepreneurship (PSGE)

PSGE was launched in 2001. The program runs through the existing Governor's school during the summer. It provides hands on exposure to entrepreneurship. After the state cut funds for the program, Lehigh University assumed responsibility for the program in 2009.

http://www.iacocca-lehigh.org/Iacocca/psge/

South Carolina Governor's School

South Carolina started the Innovation, Technology and Entrepreneurship Among Middle Schoolers (iTEAMS) program in partnership with Google. The program exposes young students to topics in computer science, app development, and cyber security.

http://www.iacocca-lehigh.org/Iacocca/psge/

Kentucky's Governor's School for Entrepreneurs (GSE)

Kentucky will be opening the GSE during 2013. This summer program provides students experience developing a business venture from the ground up.

http://gse.kstc.com/

SB1248 (Black)/HB2101 (Ramadan) – High school to work partnerships

Directs the Board of Education to develop guidelines for the establishment of High School to Work Partnerships between public high schools and local businesses to create apprenticeships, internships, and job shadow programs in a variety of trades and skilled labor positions. The bill also provides that local school boards may encourage the local school division's career and technical education administrator to work with the guidance counselor office of each public high school to establish such partnerships.

http://lis.virginia.gov/cgi-bin/legp604.exe?131+sum+HB2101

Action Item #4: Expedited decisions on alternative surface-influenced public well water treatment systems

Problem:

The Virginia Department of Health is committed to protecting public health by ensuring all Virginians have access to an adequate supply of affordable, safe drinking water that meets state and federal standards. The Virginia Waterworks Regulations require any drinking well facility or distribution network that serves more than 25 persons a day, whether through multiple taps (i.e.

meters) or employees at a facility, is deemed a public drinking water system and must conform to all Commonwealth guidelines. This means the water purification level for e coli, viruses, HTC, Giardia lamblia cysts, and other harmful organisms and contaminants must be removed to the Commonwealth specified levels. Currently, the technology and filtration systems accepted for public water facilities are large and expensive—in some cases, starting around \$250,000. This is cost prohibitive for the average small rural business that may employ more than 25 persons working on site within a 24-hour day.

The Virginia Department of Health is committed to periodic reviews of the Virginia Wastewater Regulations to ensure the best available water treatment technologies are permitted per the regulations. The Rural Jobs Council applauds VDH's commitment to continuous review of these regulations to ensure they reflect advancing and new technologies that produce safe and reliable drinking water at a lower cost to the operator.

The Virginia Department of Health also reviews new technology applications on a case-by-case basis. The Rural Jobs Council recognizes that water treatment systems that are effective in one location may not be equally effective in another, and accordingly, approves of VDH's efforts to review individual applications and work with operators to ensure that new systems will effectively uphold their commitment to public health and safety.

Key Players:

The Virginia Department of Health; Water Treatment System Operators; Water Quality Engineers

How it Works:

The Entrepreneurship Subcommittee of the Rural Jobs Council encourages VDH to continue to work with stakeholders and engineers during the regulatory revision process to allow for the use of new, reliable, and safe treatment technologies for surface-influenced well water to meet state and federal standards. During the revision process, the subcommittee recommends that VDH take into consideration ways in which the case-by-case review of alternative systems can safely be accelerated.

The approval process for use of new technologies understandably requires diligent review and careful consideration before approval or denial. The subcommittee appreciates the thoroughness with which VDH evaluates each application, often following up with engineers for further information or clarification before making final decisions.

From a business-owner's perspective, delays in the approval process for alternative technologies can have significant budgeting implications. Specifically, when a startup operation meets the definition of a noncommunity water supply, the owner is required to install a system meeting VDH criteria to ensure water quality remains constant and safe. Property and business owners are therefore faced with the difficult decision of installing a large and expensive treatment system that complies with state regulations, pursuing less-expensive but also effective alternative systems that require navigation of the lengthy approval process, or simply restricting employment so as not to exceed the 25 person maximum.

The Rural Jobs Council has been asked to examine policies that improve the business environment and quality of life in rural areas of the Commonwealth. It is the opinion of the Entrepreneurship Subcommittee that delays in the approval process of alternative treatment systems serve as a deterrent to job growth for start-up operations in rural areas. That said, the subcommittee recognizes the importance of a reliably safe finished product and the impact it has on quality of life and public health. For this reason the subcommittee recommends the consideration of new technology application review processes that will quickly, safely, and reliably evaluate plans.

Infrastructure

The Infrastructure Subcommittee of the Governor's Rural Jobs Council focused on three key action areas to impact economic development and job creation in rural Virginia. These key areas include: (a) capacity building, (b) healthcare and (c) access to capital. This report highlights each of these action areas and provides key strategies to effectively implement the recommendations. The document details the need for each action item and highlights the positive economic results it would have on communities throughout the Commonwealth.

Action Item #1: Promote Regional Capacity Building

The first action idea from the Infrastructure Subcommittee is to promote regional capacity building efforts in rural communities. This action idea focuses on two specific categories for capacity building that includes: 1.) organizational development and 2.) economic development. It is recommended that these capacity building efforts be implemented through a regional approach that encourages and facilitates local government cooperation in addressing problems of greater than local significance. These two capacity building categories are highlighted below.

Organizational Development Capacity

Problem:

The decline in traditional economic sectors as well as increased international competition has left many rural areas of the state behind economically. Many rural localities may lack the resources and capacity to independently address community and economic development needs. However, addressing these issues on a regional, rather than local, basis would enhance the region's ability to adequately respond to the community needs.

Recommendation:

The first action item from the Infrastructure Subcommittee is to expand and increase the support of Virginia's Building Collaborative Communities (BCC) initiative. To effectively meet the program's demand and to increase the organizational capacity of many rural areas in Virginia, the Building Collaborative Communities program should be funded at \$500,000 annually.

How It Works:

The primary objective of Building Collaborative Communities (BCC) program is to promote regional capacity and economic collaborations in economically distressed areas that stimulate job-creation, economic development, and provide a significant return on State investment. This program requires projects to facilitate significant involvement from the private sector, economic development agencies, community organizations, educational institutions, nonprofits, local leaders and governmental officials. Investment and engagement from local private industries are a vital component of this program. Collaborative resources for this program are provided from a number of state entities, including the Department of Business Assistance, Virginia Tourism Corporation, Virginia Economic Development Partnership, Department of Housing and Community Development, Virginia Community College System and other agencies as appropriate.

Community capacity underpins and spurs economic development. Sustainable community and economic development does not come from the outside in, but rather, from the assets and leadership from within the community. Capable leadership is a key factor in a community's sustainable growth and economic development. Thus, it is imperative for communities to develop leaders with the capacity and commitment to help their communities survive and thrive. Developing ways to enhance and strengthen local leadership is necessary for distressed communities to compete in the knowledge-based economy. Human resources are the community's greatest asset in addressing sustainable economic development issues, and community and economic development initiatives are difficult to sustain without a constant source of strong and devoted leaders.

In the global economy, regions must serve as the economic unit. Economic boundaries are not defined by political boundaries. Economic research shows that in areas around the country where localities work together cooperatively, economic competiveness is enhanced. Quality of life indicators such as income disparity between localities, area median income, and job creation are more positive in areas that interact on a regional level. Regional, community-based strategies that capitalize upon the unique assets of communities offer stronger opportunities for success and long-term sustainability. Location decisions made by businesses are based on a number of factors, ranging from quality of life, local amenities, supply chain availability, and workforce competency to name a few—low on the list of considerations, if at all, are geographical boundaries. Collaborative efforts represent the best opportunity for economic growth and prosperity.

Key Players:

The key players for this action item would include: Elected Officials, Decision Makers, Community Leaders, Local Governments, Planning District Commissions (PDCs), Regional Economic Development Marketing Organizations, Chambers of Commerce, Private Sector, State Agencies with economic development mission.

Highlights:

In the two years since its inception, the Building Collaborative Communities initiative received seventeen application proposals of which, nine regional projects were funded. The program has strategically invested \$400,000 in these regional initiatives which has leveraged commitments of \$750,000 from local partners and \$80,000 from state agency partner. Interest in the BCC remains high and from all across the Commonwealth. New regional initiatives, such as the Stronger Economies Together program initiated in the Northern Neck and Southern Virginia regions have further spurred other regional interest. A few exemplary BBC funded projects include:

• Virginia Growth's Alliance (formerly Trans Tech)

Virginia Growth's Alliance (formerly TransTech) is a newly-formed organization of six counties and one city that have come together to facilitate investment attraction and economic growth in the region. The localities include the counties of Brunswick, Charlotte, Greensville, Lunenburg, Mecklenburg and Nottoway and the city of Emporia. Although, the initial major focus is on business recruitment, the organization is also creating strategies for entrepreneurship development, asset development and leadership development. Within the past year, the region has engaged the community by hosting a creative economy conference, creating a cultural asset map and leveraging resources to obtain additional capacity building support.

Fields of Gold

This regional economic development collaboration promotes agritourism in the Shenandoah Valley. It is a collaborative effort among six counties and five cities in Virginia. Fields of Gold program has brought together local government officials and agritourism representatives from localities across the region to work together on a comprehensive marketing, tracking, and capacity building initiative. It is intended to create and retain jobs on the farm, expand tourism jobs off the farm, and nurture an environment for entrepreneurism. Additionally, Fields of Gold strives to establish better linkages between agricultural producers and consumers which strengthen the local food system and invigorate the region's economy.

• Virginia's Region 2000

The Building Collaborative Communities program can also serve to expand and enhance the services delivered through an already existing, well established regional organization. BBC funds were invested in Virginia's Region 2000 to primarily focus on developing and fostering entrepreneurship.

The Virginia's Region 2000 partnership is an interwoven network of organizations with a centralized vision to provide regional development leadership within the 2,000 square miles that surround Lynchburg, Virginia. The organization provides a single point of contact to the public and private sector for regional planning services, economic development, marketing, and workforce training. BCC funds will be leveraged in Region 2000 projects to further add value to an already effective regional organization.

Economic Development Capacity

Problem:

Virginia is competing against states that have strong certified sites programs, putting the Commonwealth at a significant disadvantage when companies are seeking new locations. For businesses, narrowing sites to a short list of candidates that clearly meets their goals, with minimal risk and cost, is critical. One step that can be taken to improve the competitive positioning of states and localities is to ensure that development costs are minimized through programs that prequalify certain real estate properties by identifying ownership structures, infrastructure, appropriate zoning, and conducting certain environmental impact studies. These prequalification programs, known as "certified sites" or "shovel-ready" programs, effectively reduce risk and shorten development timeframes. States who offer certified sites have demonstrated success in new business location. Virginia has been omitted from some site searches because it does not have similar prepared sites.

Recommendation:

The second action item from the Infrastructure Subcommittee is to expand and increase the support for the Right Now Sites initiative currently managed by the Virginia Economic Development Partnership. To effectively compete with other states, the program needs to be enhanced to better define and set certification standards, and then supported with funding for localities who desire to complete the certification process. To meet the program's anticipated demand and to increase the competitive standing of rural areas in Virginia, the Right Now Sites program should be funded at \$500,000 annually.

How It Works:

The current Right Now Sites Program is designed to ensure business prospects and consultants that those business properties designated as "Right Now Sites" have all the essential elements in place for rapid business location that lowers risk and shortens timeframes for development. The Right Now Sites Program establishes minimum infrastructure requirements for eight industry groups (light manufacturing, general manufacturing, heavy manufacturing, mega sites, business/industrial parks, office parks, warehouse/distribution, and research & development). In addition to these industry-specific standards, separate "readiness standards" have been established to ensure that these sites are truly ready to go. The Virginia Economic Development Partnership has determined that each site designated as a "Right Now Site" has met the minimum readiness standards and one or more industry-specific criteria. The program as currently implemented does not offer funding support for localities who wish to achieve the "Right Now Site" designation, nor does the program have a recognized brand in the market.

In an enhanced program, VEDP would assess the current industry groups and standards, make modifications as necessary (i.e. site certification for data centers would align well with Virginia's current strength in this growing sector), identify strategic partners with whom to collaborate (i.e. utility companies and rail companies are traditional partners in site certification programs; the Virginia Department of Housing & Community Development offers technical assistance programs in its capacity-building role), create a framework for receiving applications for financial support from localities and regions who are interested in achieving certification; and

create a branding/marketing strategy to promote these sites to corporations and site selection consultants.

An enhanced Right Now Sites Program will complement and align strategically with the proposed Building Collaborative Communities program, in that both programs support increasing community capacity that will attract private-sector investment. The Right Now Sites Program's marketing and branding element will link the prepared communities to the market opportunities, by creating a brand standard that exemplifies excellence, and by utilizing the marketing channels of strategic partners such as electric utilities, railroads, and broadband partners.

Mark Williams, President of Strategic Development Group, says "For......corporate clients, narrowing sites to a short list of candidates that clearly meet.....goals with minimal risk and cost is critical. As site search timelines become more compressed, the availability of site data generated through quality site certification programs will be increasingly attractive to site selectors and their corporate clients. As the economy continues its recovery, site location projects will likely become more frequent, making site readiness identified by quality site certification programs an important marketing tool for economic developers. For corporations considering site locations, sites certified correctly will significantly reduce development risks and related delays to project timelines while simultaneously generating cost savings."

Key Players:

The key players for this action item would include: Virginia Economic Development Partnership, and other state agencies with an economic development mission; federal agencies with an economic development mission; Virginia's electric utilities, railroads, and broadband providers; regional and local economic development organizations and local elected officials; planning district commissions; and private sector partners.

Highlights:

Relevant site certification programs in Virginia's competitor states:

• Tennessee Valley Authority's Megasite Program:

In 2004, the Tennessee Valley Authority established one of the first, if not the first, noteworthy site certification program with its Megasite initiative. Originally launched to certify sites for automotive assembly plants, TVA's Megasite program has been incredibly successful, with five of the eight certified sites sold to major corporations. To date, Dow Corning/Hemlock Semiconductor, VW, Paccar, Toyota and Severstal are or have built massive facilities on sites in Clarksville, Tenn., Chattanooga, Tenn., Columbus, Miss. and Tupelo, Miss. Together, those projects represent capital investments that total more than \$5 billion with 5,500 or more direct jobs created. Three sites remain in TVA's Megasite inventory; the 2,100-acre I-24 Megasite in Hopkinsville, Ky., the 1,720-acre (plus 3,000 acres under option) Memphis-Jackson I-40 Advantage Megasite in Haywood, Tenn. and the 2,010-acre I-65 Megasite in Athens, Alabama.

• Mississippi Power's Project Ready Program

Like TVA's Megasite Program, Mississippi Power partnered with South Carolina-based McCallum Sweeney Consulting to design and implement a customized site certification program for southeast Mississippi. Mississippi Power's Project Ready site certification initiative has an aviation and aerospace flavor to it, as several of the sites are located near the John C. Stennis Space Center. There are currently five sites in the Project Ready inventory, including Howard Technology Park, Key Brothers Aviation Site, George County Industrial Park Phase II, Jackson County Aviation Technology Park and John C. Stennis Space Center. All of Project Ready's sites have undergone a rigorous screening and are available, fully-served, and developable.

1. South Carolina Power Team and Santee Cooper's Certified Sites Program

The South Carolina Power Team and Santee Cooper's program has certified 39 sites in South Carolina, all ranging from about 50 to 1,500 acres. The two power companies have spent well over \$1 million certifying sites in the Palmetto State. There are three large certified sites in and around Sumter and Florence, S.C. that are all 1,200-acres plus, including the Black River Airport Industrial Park (1,300 acres), the I-95 Mega Site (1,441 acres) and the Young Lands Industrial Site (1,445 acres). All three are located on or just a few miles away from Interstate 95. The South Carolina Power Team is the economic development alliance of the state-owned electric utility.

2. Entergy Arkansas' Select Site Program

This certified site program has a nice mix of 16 certified sites in Arkansas. Entergy Arkansas used Deloitte Consulting to certify sites for its Select Site program. Deloitte implemented 50-point criteria for certification and the sites range in size from 40 acres to more than 2,000 acres. Three of the sites certified by Entergy Arkansas can accommodate just about any large project. The Saline County I-530 site encompasses 2,045 acres and the Carlisle, Ark. I-40 site totals 1,925 acres. Also in Entergy's inventory is the M-1 site in Marion, Ark. that Toyota considered twice in the last decade for automotive assembly plants that went to San Antonio and Tupelo, Miss. Since 2005, Select Site has created 2,091 jobs with \$335 million in capital investment.

Action Item #2: Improve Health Care Outcomes

The second action idea from the Infrastructure Subcommittee is to support efforts to increase health care outcomes, by improving health care systems, in rural areas. Among other challenges that rural localities face in terms of successfully sustaining and growing their economies, is the impact of the health of their populations – their workforce – which is a key driver as companies consider locations for expansions. Rural localities also face the challenge of lack of critical population mass due to a dispersed geography, thus limiting the location of key clinical services and physicians. Rural localities also struggle to maintain quality support staff in the health care industry; jobs which pay well but require educational standards that may not be attained by rural populations. Combined with the anticipated impact of adjusting to the federal Affordable Care

Act – noting that rural health care systems are disproportionally dependent upon reimbursements from Medicare and Medicaid – rural communities are facing a crisis of magnitude that must be addressed.

Comments received from CEOs of Virginia's rural hospitals were collected and presented to the subcommittee. Summarized, the CEOs comments indicated the following are the primary challenges facing rural health care systems:

- Decreasing & inadequate payment/reimbursements, and competition for paying customers
- Recruitment and retention of physicians
- Financial support for physician hospital enterprise and information technology
- Managing the continuum of care and value-based purchasing
- Population critical mass to support key clinical services

Comments from other health care professionals also raised the issue of needing to evaluate Virginia's "scope of practice" regulations. Ensuring that state-specific scope of practice laws allow non-physician primary care providers to diagnose, order tests, write prescriptions and make referrals could increase the capacity of primary care, especially in rural areas by increasing their reach and allowing non-physician primary care practitioners to practice at the top of their licensure. Non-physician providers are trained to treat patients with low-acuity illnesses and provide care to those with chronic diseases, as well as referring patients with more complex issues to physicians. This flexibility allows physicians the time to treat those with the more complex issues while ensuring all patients are seen in a timely and an efficient manner.

As evidenced by the above, health plays a critical role in sustaining and developing strong rural communities. Rural health is a necessary component of community health and economic development, in that the availability of a healthy workforce is critical in attracting employers. In addition, health service providers (hospitals, community health centers, nursing facilities, pharmacies, home care agencies and others) are oftentimes the major employers in many rural communities. The related expenditures generated by these providers have significant direct and indirect community impacts (i.e., economic multiplier effects). There is an undeniable connection between employment (a key social determinant of health) and improved health status. Strategies should address support for 1) sustaining and growing the scopes of practice in rural communities; 2) workforce development for health care professions; and 3) mitigating the impact of the Affordable Care Act.

1. Recruitment and retention of health care professionals

Problem:

Recruiting and retaining physicians (and their professional services support systems) in rural communities is extremely challenging. The competition for physicians and related health care professionals is intense. A 2009 policy brief from the federal Office of Rural Health Policy highlighted that 77% of rural counties face a shortage or primary-care providers. The number of general surgeons practicing in rural communities decreased 21% between 1981

and 2005. Rural physicians are often without "cross-coverage" (serving as the sole provider in a given region) and this 24/7 lifestyle is not attractive to young residents. In addition, finding spousal employment can be a challenge in rural areas.

Recommendation:

The Infrastructure Sub-committee recommends supporting a series of tools that can positively impact the successful retention and recruitment of primary care health care professionals. The tools include the following programs and would necessitate budget increases, program modifications, or both.

1. Expand the parameters and funding of the Virginia State Loan Repayment Program to effectively double the number of recipients serving in rural areas, within two years.

How It Works:

The Commonwealth of Virginia offers the Department of Health Professions (DHP), Virginia State Loan Repayment Program (VA SLRP). This program offers substantial financial assistance for repayment of qualified medical education loans for eligible primary care disciplines and specialties. Loans are repaid in return for a minimum of two years of fulltime practice of the recipient's specialty in a federally designated Health Professional Shortage Area (HPSA) of Virginia. The Loan Repayment Programs pay up to \$25,000 a year toward the qualified educational loans of program participants. The minimum service obligation is 2 years, during which the maximum payment of \$50,000 will be paid the first year. Subsequent extensions of the loan repayment contract are entitled to annual loan repayments of up to \$35,000. These benefits are in addition to any salary or compensation received from employment by an authorized program employer. Loan repayment program participants are required to provide fulltime clinical service at a service site for the period agreed to in the contract. These sites are specific primary health care or psychiatric employment opportunities in a medically underserved area of Virginia. VA SLRP participants are required to complete their obligation in a federally designated primary care Health Professional Shortage Area (HPSA) or a federally designated mental HPSA (for psychiatrists) that have been identified by the Virginia Department of Health, Office of Minority Health and Public Health Policy as having a deficient of certain health professionals.

2. Expand the Health Professional Shortage Area (HPSA)

How It Works:

The federal Health Professional Shortage Area (HPSA) designation identifies an area or population as having a shortage of dental, mental, and primary health care providers. HPSA designation is used to qualify for state and federal programs aimed at increasing primary care services to underserved areas and populations. A HPSA designation is based on three criteria, established by federal regulation, based on criteria including 1) geography rational for delivery

of health services; 2) specified population-to-provider ratio must be evidenced; and 3) health care resources in surrounding areas must be unavailable because of distance, overutilization or other access barriers. Health Professional Shortage Areas (HPSAs) have shortages of primary medical care, dental or mental health providers and may be **geographic** (a county or service area), **demographic** (low income population) or **institutional** (comprehensive health center, federally qualified health center or other public facility). Current designations for health professional shortage areas and medically underserved areas are inadequate in many ways. Counting only physicians provides an inadequate picture on primary care availability within rural communities. Use of high-need indicators fails to capture broader access measures. The persistence of separate federal designations for different programs creates a burden on local communities. An assessment of Virginia's current HPSAs indicates that there are a number of rural communities which do not have the HPSA designation. The Infrastructure subcommittee recommends that an assessment of these areas be conducted and evaluated for designation.

3. Increase funding to support new and existing rural residency sites

How It Works:

Rural family medicine residency training is a viable and an important pipeline for rural health care. Testimony to the Infrastructure Subcommittee from health care professionals indicated that an expansion of rural residency sites in Virginia could have a positive impact on the retention of health care professionals in rural areas. While the subcommittee has been unable to validate the number of rural residency sites in the Commonwealth, several have been identified as successful examples.

Highlights:

The Shenandoah Valley Family Practice Residency Program is a rural-oriented program in the Shenandoah Valley of northwestern Virginia, about 70 miles west of Washington, D.C. It is affiliated with the Medical College of Virginia/Virginia Commonwealth University School of Medicine (www.familymedicine.vcu.edu) and is fully accredited for our 3-year residency by both the ACGME and the American Osteopathic Association, allowing full board certification eligibility for MD and DO physicians. It has 5 residents in each class. Its tag line is "the best of both worlds". http://www.valleyhealthlink.com/svfpr/

The **Lynchburg Family Medicine Residency Program** was established in 1975, and is the only residency in a community based program affiliated with Centra Health, Inc. and the University of Virginia. Residents care for patients in Lynchburg as well as the Big Island Family Medicine Center - its rural site. It offers a solid base in hospital medicine and care for patients at Lynchburg General Hospital and Virginia Baptist Hospital. Continuity of the physician-patient relationship is valued, and patients are also seen in local nursing homes and home visits.

The Blackstone Residency Program markets that the best of both worlds come together in this program - the excellence of academic Family Medicine and the reality of rural Family Medicine. The Blackstone Rural Program is located in Blackstone, Virginia, a division of the St. Francis Family Medicine Residency, sponsored by Bon Secours Health System, and affiliated with Virginia Commonwealth University School of Medicine. Its program is a 2-2-2 integrated rural

training track. Residents spend their intern year in clinical practice at St. Francis Family Medicine in Midlothian, VA and the upper two years in clinical practice in rural Blackstone. This rural continuity practice is interspersed with specialty rotations in pediatrics, cardiology, OB, sports medicine, and many other specialties at Bon Secours St. Francis Hospital in Midlothian, VA and St. Mary's in Henrico, Virginia. Blackstone Family Practice had a long history of training high quality residents for over 30 years with approximately 2/3 of the graduates practicing in rural areas upon graduation.

The Wellmont Osteopathic Family Medicine Residency Program was established in June of 2009 and approved by the American Osteopathic Association for twenty-four (24) Family Medicine Residents. The program, based in rural Wise County at sixty beds Wellmont Lonesome Pine Hospital, accepted the first two residents in July of 2010. The residents do rotations and training at Wellmont's other two rural Virginia facilities, Mountain View Regional Medical Center in Norton and Lee Regional Medical Center in Pennington Gap. Residents also do training rotations at the System's Tennessee facilities to include Bristol Regional Medical Center and Holston Valley Medical Center. The residency program has been almost immediately successful growing from two residents in the first year, to twelve in the second year and nineteen in only the third year of operation. The three-year residency produced its first graduate in July of 2012, who after completing his training in rural Wise County, decided to locate there to begin his practice with Wellmont Medical Associates. In calendar year 2013, four additional residents will complete their training, with some already having accepted offers to remain in rural Virginia and practice with Wellmont. The program is expected to continue to grow and evolve to other residency opportunities and potentially specialty fellowship programs. This residency program is accredited by the AOA and has been recognized by the Virginia Hospital and Healthcare Association as a Community Benefit Award Finalist in 2012.

Key Players: The key players for these action items would include: rural health care systems; state agencies whose missions incorporate rural health care; federal agencies whose missions incorporate rural health care; medical schools & clinics; workforce delivery system partners; community foundations; federal and state elected officials.

2. Workforce Development for Health Care Professionals

Problem:

According to the National Rural Health Association, near-retirement primary care physicians (age 56 or older) constitute a larger proportion of the rural workforce (25.5 percent urban, 27.5 percent rural, and 28.9 percent remote rural), making it likely that rural workforce shortages will increase in the years ahead, putting even more pressure on the existing rural workforce. The health care labor shortage in the United States has been widely documented and is expected to last for the foreseeable future. The increase in population is partially responsible for the health care labor shortage.

As the health care workforce ages, the U.S. population is expected to rise by 18 percent by 2030, and the population over the age of 65 is expected to increase three times that rate. In addition to

the overall shortage of health professionals, maldistribution is another prevalent obstacle rural Americans face in accessing timely and appropriate primary health care services. As of June 30, 2011, the number of non-metropolitan primary medical health professional shortage areas (HPSAs) was 4,148, representing 65 percent of the primary care HPSAs and nearly 34.5 million people. Nationally, these HPSAs would require an additional 3,959 practitioners to remove the HPSA designations and 8,851 to achieve target population-to-practitioner ratios. Based on comments received by the Infrastructure Subcommittee from Virginia health care professionals, national trends are mirrored in rural Virginia. The Virginia Health Workforce Development Authority is tasked with developing a statewide health professions pipeline.

Recommendation:

The Infrastructure Subcommittee recommends that state funding be targeted for:

- graduate medical education training, and
- clinical practice sites for advanced practice professionals

In addition, the Subcommittee recommends that consortia models of workforce development systems in the health care field be developed to pilot in rural geographies.

How It Works:

Utilizing existing partnership structures in rural regions of Virginia, and in collaboration with Virginia's Community College System, identify two pilot regions in which funds can be used to support both graduate medical education training (see above Rural Residency programs) and health care support professions such as CNAs, health technicians, etc. The expectation is that the support professions programs will target rural residents, youth or displaced adult workers and will result in at least an associate degree in the identified occupational categories. For both audiences, leverage existing partnerships to reach the intended candidates, and support the programs by establishing linkages with health care providers who can commit to supporting employment upon completion of programs.

Key Players:

The key players for these action items would include: rural health care systems; state agencies whose missions incorporate rural health care; federal agencies whose missions incorporate rural health care; medical schools & clinics; workforce delivery system partners; community foundations; federal and state elected officials.

Highlights:

Highlighted below are three examples of health care system organizations in rural Virginia:

The Southwest Virginia Area Health Education Center (SWAHEC)'s mission is to provide education, information, training, and services to improve health outcomes in Southwest Virginia. SWAHEC primarily focuses on rural health care workforce development to meet the needs of

communities and health care professionals. Located in Tazewell, Virginia, SWAHEC reaches some of the neediest areas in the Appalachians. Established in 1993, SWAHEC is an independent, not-for-profit corporation led by a volunteer Board of Directors. The Board is primarily made up of community members from health care and education organizations. Southwest Virginia AHEC's major programs include:

- Health Professions Students' Clinical Training Opportunities
- Exposing Youth to Health Careers
- Support for Practicing Health Professionals
- Community Health Initiatives

The Southside Area Health Education Center In 1992, the Southside Area Health Education Center (AHEC) was incorporated by local community leaders to address the availability and distribution of health care providers in its 15 county and 3 city region. Health care workers are in short supply in 12 of Southside AHEC's rural communities, which is compounded by a growing demand for health care services. To help these underserved communities attract and produce more health care professionals, the Southside AHEC engages in a wide array of education-based activities that range from summer health careers camps and school clubs for middle and high school students to clinical training opportunities for health professions students in community-based clinics to providing educational resources for health care practitioners. The mission of the Southside Area Health Education Center, Inc., is to improve the health of Southside Virginians through health careers promotion, practice support, and health education. The goals of the Southside Area Health Education Center, Inc. include:

- Provide secondary students exposure to health careers and the opportunities available in health careers.
- Enhance and expand relationships with health training institutions.
- Identify means of support to the community-based training programs of Primary Care and allied health professional students and residents in Southside Virginia's underserved areas.
- Provide practice support to health care professionals, matching graduates to practice sites and disseminate information through modern technology.
- Creating partnerships with community businesses, healthcare, education and human service organizations to achieve the shared goal of improved health and disease prevention for the citizens of Southside Virginia.
- Promote a broad based concept of wellness for Southside Virginians.

Current Projects

- Southside AHEC assists MCV/VCU School of Medicine with the placement of approximately thirty, 3rd year medical students in the region.
- In partnership with the Virginia Foundation for Healthy Youth (VFHY) the Southside AHEC works with more than 360 disadvantaged students in grades K-8 to instill resiliency, social skills, emotional development, character building skills and health living lifestyles.

The Southern Virginia Higher Education Center (SVHEC) has had incredible impact in workforce development in and outside health care. The Center of Nursing Excellence was developed at the SVHEC just a few years ago to combat the nursing shortage in southern Virginia. It's a vibrant example of best practice in a rural community.

3. Medicaid Reform

Problem:

The Infrastructure Subcommittee heard passionate testimony from rural health care professionals that the Affordable Care Act implementation poses major risks especially for rural providers. Rural Virginia hospitals generally have a higher percentage of uninsured and Medicare/Medicaid beneficiaries coupled with a lower percentage of commercially-insured patients (commercial payers represent only 20% of the payer mix in rural hospitals). Virginia must remain engaged to both understand the implications of the Affordable Care Act while identifying appropriate ways to brace for the change without compromising care to citizens in rural Virginia.

Health care provides over 50,000 direct jobs in rural Virginia and another 20,000 indirect jobs. In some rural communities, the health care sector represents up to 37% of jobs; in the majority of rural Virginia, health care represents between 12% - 19% of all jobs. These jobs are not ones that can be outsourced and are relatively stable, they are generally higher-paying; and they build on STEM knowledge. The importance of their impact in rural Virginia, as a stabilizing force in local and regional economies, is evident.

Recommendation:

The Infrastructure Subcommittee received input from various health care professionals related to Medicaid expansion. Comments received included the view that there is risk and reward resulting from a possible Medicaid expansion. Ultimately, however, the Infrastructure Subcommittee recognizes that the complexity of this issue, combined with the timeframe in which the Rural Jobs Commission report is due, does not give the Subcommittee appropriate capability to make a recommendation on the topic of Virginia's approach to Medicaid reform. Due to the significant impact on the citizens and health care systems that anchor rural Virginia, the subcommittee defers to the Medicaid Innovation and Reform Commission for action.

How It Works:

Medicaid Reform budget language was passed by the 2013 General Assembly and subsequently signed by the Governor. Several components captured in the budget language are underway by the department, while strategic approaches to all described reforms are being prepared. The Medicaid Innovation and Reform Commission is a legislative body that will consider these reforms and will signal back to the legislature at large when reforms are substantial enough to reengage the conversation of a Medicaid expansion. Undoubtedly, health coverage is important; however, the dialogue concerning any type of Medicaid expansion must include the often unspoken reality that coverage does not equal access to care.

Key Players:

The key players for these action items would include: rural health care systems; state agencies whose missions incorporate rural health care; federal agencies whose missions incorporate rural health care; medical schools & clinics; workforce delivery system partners; community foundations; federal and state elected officials, and the Virginia Medicaid Innovation and Reform Commission.

Action Idea #3: Support efforts to Increase Access to Capital in Rural Areas

The third action idea from the Infrastructure Subcommittee is to support efforts to increase access to capital in rural areas. Rural municipalities must have reliable access to capital to help optimize economic development opportunities and improve the overall quality of life of local communities. Increased access to capital can attract new businesses to rural areas and create viable, competitive, communities.

As the economic landscape has changed in rural areas, it is no longer a viable economic strategy to simply pursue the large industrial employer; instead, a diversified job creation strategy is needed. Strategies must be identified for communities to create access to capital and training for small business owners to invigorate the area. Strategies should support these efforts both through technical assistance to the localities and the organizations that provide funding and implement entrepreneurial assistance. Below are key strategic recommendations for increasing access to capital in rural areas. These strategies are primarily focused on: 1.) entrepreneurship/business development, 2.) water/waste water, and 3.) broadband.

1. Entrepreneurship and Business Development

Problem:

In many of Virginia's rural communities, the economic engine that once thrived is no longer viable. Many of these communities were driven by textiles, manufacturing, coal, rail, and other forces that no longer sustain them. Many of these localities face severe economic distress as they have fallen behind the rapid pace of economic change prevailing in much of the state. Rural areas often have both the greatest need and the least ability to address their condition. To succeed, rural communities must be positioned to access opportunities in current markets by developing local and regional economic development strategies that focus and guide both local and state investment. Maintaining economic viability requires finding new economic engines, the future economic drivers for a community, and often it is the small businesses and entrepreneurial networks that are vital to that new framework. Additionally, these small businesses must have access to entrepreneurial assistance and financing through loan pools and microfinance.

Recommendation:

The Infrastructure Sub-committee recommends Virginia provide an annual allocation of \$ 4.0 million to state agencies to increase access to capital for developing and expanding entrepreneurial networks and business development.

How It Works:

Improving access to capital for communities, entrepreneurs and businesses must be a vital part of a comprehensive economic development strategy for rural regions. These funds would be directed to state agencies with an economic development mission and currently able to provide financing directly to local businesses and communities. These funds would be leveraged with private investments to multiply the economic impact on the region. These funding strategies should be a part of a broader, more coherent regional approach that facilitates both financing assistance and technical assistance. This rural financing effort should promote a regional approach that includes; "value added" agribusinesses, small farm initiatives and other commercial development.

Key Players:

The key players for this action item would include: Community Banks, Community Development Financial Institutions (CDFIs), Lending Institutions, Community Foundations, Private Sector Investors, State Agencies with an economic development mission.

Highlights:

Highlighted below are three institutions that promote increased access to capital throughout Virginia.

• Community Banks

Community banks play a primary role in the economic development of rural Virginia. Community banks are often the first line of financing for entrepreneurship, business development and company expansion. These banks have long established ties to the local communities and are in the best position to understand the needs of local area businesses. State policy and programs should support and not compete with community banking efforts.

• Virginia Small Business Finance Authority (VSBFA)

The Virginia Small Business Finance Authority (VSBFA) promotes economic development and provides state and federally source financing programs for the benefit of businesses and local IDAs and EDAs. VSBFA assists Virginia's existing businesses and those businesses that are seeking to come to Virginia through a portfolio of financing programs. VSBFA does not provide grants; however, the agency adds value by helping Virginia's financial institutions offer business loans that they might not be able to offer without our assistance.

• Virginia Community Capital, Inc. (VCC)

To help address some of these financing issues in rural and distressed regions, the

Commonwealth created the Virginia Community Capital, Inc (VCC). Virginia Community Capital is a multi-million dollar non-profit, community development financial institution that provides innovative loan and investment solutions for affordable housing and economic development projects throughout Virginia. VCC is a unique banking structure that provides loan capital that is broader than bank lending to projects that have a positive community impact in low- to moderate-income communities in underserved geographies and markets. VCC partners with community banks where appropriate and also seeks to address the capital needs of worthy projects that exceed the capacity of community banks. VCC provides great partnership opportunities for the Commonwealth and has played a key role in the implementation of new economic development programs, providing underwriting services, developing financial packages, and loan servicing.

2. Water and Wastewater

Problem:

Access to safe, reliable drinking water continues to be a critical need in many rural parts of Virginia. Due to the limited number of customers, small public water systems are not able to generate enough revenue to pay additional technical staff, make infrastructure improvements, pay debts, or even meet national drinking water standards. Unlike municipalities with general taxation authority, many of the small water systems in rural Virginia can only raise revenue through user and connection fees. Often there have not been rate increases to provide sufficient revenue to properly manage and maintain these systems, resulting infrastructure which is inadequate and failing. Additionally, challenges posed by the geography and terrain often prohibit the installation of conventional wastewater systems, resulting in the need for alternative systems which are generally far more expensive and which carry their own set of maintenance issues. Also, small water systems in rural Virginia have fractured and uncoordinated delivery systems, which would benefit from greater consolidation.

Recommendation:

It is recommended that the State provides \$500,000 to fund a state administered program to plan, design and implement three (3) regional water/wastewater initiatives.

How It Works:

This program would be coordinated and delivered through a state agency in collaboration with selected Planning District Commissions. This funding would be used for planning and preliminary engineering of more cost effective alternative wastewater treatment models, including resolving issue of proper management and maintenance of alternative systems. The State should identify funding sources and incentivize efforts to pursue more efficient regional approaches to consolidate water and wastewater systems. These strategic investments in regional projects should facilitate orderly economic development similar to the Virginia Coalfields Water Study (VCRWS). This study conducted a regional needs assessment for rural communities and to address appropriate funding and implementation

strategies for Virginia's Coalfields region. Virginia should also provide funding to address water quality issues in non-Chesapeake Bay communities that lack access to WQIF. This funding could be similar to the funds that were allocated for the Southern Rivers Watershed Enhancement Program (SRWEP). This initiative was designed to improve the water quality in the streams and groundwater of the "Southern Rivers" region of Virginia.

3. Broadband

Problem:

Currently, many rural communities are not afforded access to broadband telecommunications and hence deprived of their ability to participate in enhanced social, education, occupation, healthcare, and economic development opportunities. It is critical that all Virginia communities have affordable access to high-speed broadband telecommunications.

Recommendation:

The Commonwealth should consider the need for annual funding for the planning and deployment of affordable, high-speed broadband infrastructure in UNserved areas (as determined by the Commonwealth Broadband Mapping Initiative).

How it would work:

Community initiated projects seeking funding should utilize the extensive mapping of existing telecom infrastructure carried out by the Secretary of Technology and the CIT with the cooperation and assistance of the private sector to demonstrate that the proposed area(s) to be planned for/served are currently "unserved". Projects under consideration for funding (planning and/or infrastructure deployment) should be merit based and emphasize the applicant's ability to provide (contract for, deploy) affordably priced, sustainable high-speed (as defined by the FCC) broadband services in UNserved areas. Strategies should: a) emphasize collaboration and partnership b) be integrated into a broader community and economic development strategy, and c) focus on solutions that emphasize long term sustainability that leverage, to the fullest extent possible, existing public and private sector assets.

Problem:

Many rural communities and smaller providers do not have the staffing or skill sets necessary to successfully compete for federal broadband funding opportunities.

Recommendation:

The Commonwealth should consider creating (funding) a federal funding assistance program to provide assistance to communities and small Internet Service Providers (ISP's) who lack the staffing and skill sets to effectively compete for federal funding opportunities.

How it would work:

The program would be established to work with communities and small private sector providers who lack the ability to effectively apply for federal broadband funding opportunities. Applicants would request funding to hire a grant-writer to assist with the preparation and submission of federal funding proposal preparation on a catch-match basis. The Center for Innovative Technology ran a similar program several years ago.

Problem:

Commonwealth public policies related to the deployment of affordable, high-speed broadband services should be evaluated on a regular basis to insure that programs, policies, and legislation remain relevant.

Recommendation:

The Commonwealth's Broadband Advisory Council should review public policy related to the provision of broadband services in rural areas of the Commonwealth to identify opportunities and barriers to the provision of such services. The intent of this review is to ensure that Virginia is best positioned to promote the development of affordable broadband in rural areas.

Stakeholders:

The key players for this action item would include (but not be limited to): Elected Officials, Community Leaders, Decision Makers, Chambers of Commerce, Local Governments, Planning District Commissions (PDCs), Regional Economic Development Marketing Organizations, Appropriate State Agencies, Broadband Authorities, Broadband Service Providers, Wireless Service Authorities, the Private Sector, and the Office of Tele-work Promotion and Broadband Assistance.

Workforce and K12

The K-12 and Workforce Subcommittee of the Governor's Rural Jobs Council focused on six key action areas for workforce development of K-12 students and adult populations served through Virginia's Workforce Network (VWN). Key areas of inquiry and recommendation include: (1) Expanding access to dual-enrollment, particularly in Science, Technology, Engineering, Mathematics, and Health (STEM-H); (2) Strengthening pipeline and credentials of rural STEM-H teachers; (3) Sustaining and expanding use of annual Report Card on Workforce Development in Virginia; (4) Conducting public awareness campaign for middle skills jobs and the Career Readiness Certificate (CRC); (5) Disseminating regional workforce solutions that address skills gap in key industry sectors; (6) Guaranteeing that Participants of Virginia's Career and Technical Education (CTE) and Workforce Programs have opportunities to earn a work readiness credential. A total of eight specific policy or budget recommendations are included for these six action areas.

Action Item #1: Expand participation of rural high school students in dual and concurrent enrollment courses in Science, Technology, Engineering, and Mathematics (STEM-H), including Career and Technical Education (CTE)

Problem:

As stated in a recent report of the Education Commission of the States, "In today's global economy, knowledge truly is power." With most labor forecasts projecting, by 2020, 66 percent of all jobs will require some level of education beyond high school, and with the fastest growing and highest paying occupations between now and 2014 requiring some form of postsecondary education, increasing the number and percentage of rural Virginians attaining a postsecondary education credential remains essential to job creation. As the U.S. Chamber of Commerce's #1 ranked state for STEM (Science, Technology, Engineering, and Mathematics) jobs, with the 3rd highest rate of STEM job growth in the United States according to an analysis by Chmura Economics, Virginia needs to produce more college graduates with STEM-H degrees to maintain our economic competitiveness. Several regions with the greatest discrepancy between STEM-H degree attainment and employer demands are located in rural Virginia.

A growing body of national research documents the benefits of dual-enrollment programs administered in high school classrooms, on a college campus or through a distance learning provider. According to the U.S. Department of Education, college credits earned prior to high school graduation reduce the average time-to-degree and increase the likelihood of college graduation for high school student participants. Research reported by Regional Educational Laboratory of Appalachia shows that:

- Dual enrollment participants learn study skills and other habits related to college success, including learning "how to play the part of a college student";
- Dual enrollment is related to increased high school graduation;
- Dual enrollment participants are more likely to enroll in college than their non-participating peers;
- Participation in dual-enrollment is related to improved college grade point averages;
- Participation is related to persistence to a second year of college;
- Participation is positively related to credit accrual;
- Students in Career and Technical Education (CTE) programs benefit from dualenrollment participation; and
- Middle and low-income students benefit more from participation than other sub-groups.

In Virginia, over 30,488 high school students in the 2011-12 academic year earned college credits through dual-enrollment programs, and of those students 28,544 earned credits through community colleges. Virginia's Standards of Accreditation require secondary students be counseled, beginning in middle school, on opportunities for beginning postsecondary education prior to high school graduation, and Virginia's Standards of Accreditation require students in all school divisions have access to at least three Advanced Placement (AP) classes or three college-level courses for dual-credit. School division and college participation in dual-enrollment is further supported by the fact that both public schools and colleges offering students dual-enrollment options are not penalized in state appropriations, with schools receiving average daily membership (ADM) credit, and colleges full time equivalency (FTE) student credit for dual-

enrollment students. Virginia's Plan for Dual-Enrollment, a collaboration of Virginia's public school divisions and community colleges, encourages schools and colleges to offer students dual-enrollment opportunities at no tuition cost.

Beginning in fall 2013, student and parent interest in dual-enrollment as well as AP and International Baccalaureate (IB) options should be enhanced when all school divisions will begin a process of providing a personal Academic and Career Plan for each 7th grade student. These plans, supported in an online format through Virginia's Education Wizard, will include the student's program of study for high school graduation as well as a postsecondary career pathway. Plans will be developed with participation by parents or guardians, and revisited prior to 9th and 11th grades. The planning process will provide additional opportunities for informing and encouraging parents, as well as students, to learn more about the variety of early college options available in rural school divisions through AP and IB programs, as well as dual-enrollment course options available through partnerships of school divisions with community colleges, regional higher education centers and universities.

In 2012, HB 1184 was signed by Governor McDonnell into law, directing community colleges and school divisions to work together to provide a program of study for high school students that will allow them through dual-enrollment or a combination of dual-enrollment and AP classes to earn a one year General Studies community college certificate or an associate's degree by high school graduation. In spring 2013, through the new Governor's Scholar program recognizing high school graduates who attain the General Studies certificate or an associate degree simultaneously with a high school diploma, more than 610 high school graduates in the Commonwealth were recognized in graduation ceremonies as Governor's Scholars. The majority of these students were from rural school divisions.

While Southern Virginia, in particular, has higher levels of dual-enrollment participation compared to other regions in the state, more can be done to expand participation in dual-enrollment throughout rural Virginia, and particularly dual-enrollment in STEM-H courses as a means to supplement math and science options available in school divisions and provide students with a jump start toward a STEM-H college degree. The need to encourage access and success of rural students in programs such as dual-enrollment that afford an opportunity to "try on college" is important given the challenges of rural school divisions in attracting and retaining STEM-H teachers to teach higher level math and science classes and also given research that indicates that early college programs such as dual-enrollment can have a positive impact on access to and attainment of a postsecondary education credential for underrepresented students such as first generation students whose parents did not attend college.

Recommendation:

Expand the range of dual-enrollment course options available to students in rural school
divisions by directing the VCCS to work with college academic leaders and dualenrollment coordinators to share with school divisions and other stakeholders
opportunities for high school students to take STEM-H and other on-line courses through
the statewide Shared Services Distance Learning (SSDL) Program hosted by Northern
Virginia Community College.

How It Works:

Launched in 2011, SSDL currently provides more than 616 college courses available online to enrollees from 12 community colleges participating in the program. The benefit to rural students is that college course options available to them are dramatically expanded. For example, students needing foreign language courses to complete an associate degree from Rappahannock or Paul D. Camp Community Colleges can now earn those credits through online Arabic, Japanese, Chinese or Russian classes that may be designed and instructed by community college faculty from any participating college but are offered and transcripted through the local college. SSDL also offers a diverse array of college level STEM classes, including topics in information technology, mathematics, physics and geology. To date, 2,025 students have participated in the online courses provided through SSDL, and this number will significantly increase as SSDL expands to all 23 community college service regions.

SSDL has not been yet used for the purpose of expanding dual-enrollment college course options to high school students; however, with appropriate communication from VDOE and local school divisions to parents, students, counselors and career coaches, SSDL would greatly expand the number and variety of college courses available to rural students. One significant advantage of deploying the partnerships, infrastructure and resources of SSDL for dual-enrollment populations is students would continue to register for courses through their local community college participating in SSDL, alleviating administrative burdens on guidance counselors and local school division personnel who are familiar with their local college dual-enrollment and admissions procedures.

In addition to the online, statewide instruction available through SSDL, rural students should be reminded of the benefits of accessing VDOE's *Virtual Virginia* that offers 23 AP courses, free of charge, to any student in Virginia. Rural students and their parents could be informed about both these two significant, statewide resources for online college level courses through R U Ready career and college planning publication, the Virginia Education Wizard, new academic and career planning meetings with students and parents, guidance counselors and career coaches, and other information sources for college and career planning.

Recommendation:

2. Expand current statute addressing Danville, Patrick Henry, Southside Virginia, Virginia Western, and Wytheville Community Colleges, to include other rural community colleges. Approved in March 2013, SB 846 (Stanley) requires the above named colleges to develop policies to encourage greater dual enrollment in career and technical education (CTE) courses that are not at full capacity in terms of community college student enrollment. Rural school divisions and students outside the college service regions identified in SB 846 would benefit from increased access to college-based CTE courses and the law might be expanded to include all rural community colleges.

Key Players:

The key players for this action item would include: Virginia Community Colleges, Virginia Department of Education, Local School Divisions

Case Studies:

National research suggests career focused, dual-enrollment programs can benefit underachieving students and those underrepresented in higher education. Southern Virginia, in particular, has a number of robust dual-enrollment programs targeted to underrepresented populations. Partnerships between Southside Virginia Community College (SSVCC) and neighboring school divisions will result in a record estimated number of 420 high school graduates from divisions served by SSVCC earning a Career Studies Certificate, General Studies certificate, or associate degree simultaneously with earning their high school diploma in Spring 2013.

Universities and regional higher education centers are increasingly important to efforts to expand access to dual-enrollment of rural high school student populations, generally through programs targeted to specific workforce needs. For example, New College Institute has initiated a partnership with Virginia State University (VSU) providing high school students in the Martinsville Region an opportunity to earn up to 20 college credits through an Academy for Engineering and Technology that is ABET accredited, delivered by public school and VSU faculty, and delivered through both classroom and online instruction. This promising dualenrollment program, offering two programs of study in Engineering and Technology, is noteworthy for its hybrid instructional methods, the rigor of its course offerings, its alliance with a major research university, and access to labs equipped with a list from Commonwealth Center for Advanced Manufacturing (CCAM) and Rolls-Royce and other major manufacturers. Additionally, in line with national research as to best practices in dual-enrollment, the Academy integrates into its curricular offerings career and college development activities such as industry tours, college visits, and internships. In fall 2013, the Academy will offer five different courses, two on line, with enrollments of approximately 20 students per class. An expansion of the Academy to the Center for Advanced Learning and Research in Danville is planned.

National research is available on the impact of dual-enrollment, including its impact on CTE students, but to improve the performance of Virginia's public workforce development system, it is imperative to research and report effective strategies and rate of return for the multiple, diverse postsecondary education options available to high school students. With support from the Virginia Longitudinal Data System (VLDS), one of the Governor's workforce initiatives, University of Virginia (UVA) researchers are currently studying the impact of dual enrollment on high school graduation, college matriculation and college persistence outcomes. This is but one area where VLDS data is being used to inform university research and, ultimately, to inform policy and program decisions for Virginia's education and workforce systems.

Action Item #2: Expand the Pipeline of STEM-H teachers in Rural Virginia including teachers with credentials to teach dual-enrollment

Problem:

The Virginia Department of Education reports for 2013-14 CTE, Mathematics and Science will remain in the Top Ten Critical Shortages of Teaching Endorsement Areas in Virginia, with Career and Technical Education teacher shortages the most acute of these STEM-H areas of study. To expand the number of rural high school students exposed to college level course work in STEM-H fields, including CTE courses, rural Virginia must dedicate itself to "growing its own workforce" of STEM-H teachers who, with some additional graduate or undergraduate

coursework or industry certifications, are candidates to teach dual-enrollment through local community colleges or regional universities. The recent Boston Consulting Group report "Developing an Advanced Manufacturing Workforce for Virginia's Tobacco Region" cites the need to expand dual-enrollment as one of their top three recommendations to position the region's K-12 education system as a strong producer of future advanced manufacturing technicians. Ultimately, expansion of dual-enrollment is contingent upon availability of qualified faculty and instructors.

Included in the Governor's biennial budget, Virginia's 2013 Appropriations Act supports a number of initiatives to recruit and retain STEM-H teachers. These include an appropriation of \$500,000 in the first year and \$808,000 in the second year to fund a pilot initiative to attract, recruit and retain high-quality diverse individuals to teach STEM subjects in Virginia's middle and high schools. A teacher with up to three years of teaching experience employed full-time in a Virginia school division who has been issued a five-year Virginia teaching license with an endorsement in targeted areas and levels of math, science or technology education is eligible to receive a \$5,000 initial incentive award after the completion of the first, second or third year of teaching with a satisfactory performance evaluation and a signed contract for the following school year. Additionally, a teacher holding one of the targeted STEM-H endorsements and assigned to a teaching position in a corresponding STEM subject area and regardless of teaching experience, who is reassigned from a fully accredited school in a Virginia school division to a hard to staff school or a school not fully accredited and who receives a satisfactory performance evaluation and a signed contract for the following year is also eligible to receive an initial incentive award of \$5,000. An additional \$1,000 incentive award may be granted for each year the eligible teacher receives a satisfactory evaluation and teaches a qualifying STEM subject with the maximum incentive award for each eligible teacher up to \$8,000.

Recommendation:

1. Extend current biennial level of funding to Old Dominion University (ODU) to support the Monarch Teach program, based on the national UTeach model, and increase program funding in the next biennial budget to expand the program to a second university in VA.

How It Works:

Old Dominion University's Monarch Teach program replicates highly successful UTeach programs now active in 17 states across the nation. Developed at the University of Texas at Austin, UTeach's mission is to recruit, prepare and retain qualified STEM teachers through undergraduate level teacher preparation and mentoring that emphasizes inquiry, problem and project based instruction and that instills in future teachers a deep subject matter expertise in a STEM field of study. The program's track record for recruiting and preparing university students for teaching STEM-H subject areas is impressive: at University of Texas at Austin, 90 percent of UTeach program graduates enter the teaching profession and 80 percent are still teaching five years later. ODU's first cadre of students in the Monarch Teach program will begin their studies in the program in fall 2013.

The second UTeach program should be housed at a university or regional higher education center that is located in rural Virginia and that provides a significant level of teacher candidates to rural

Virginia school divisions. As was done with the first UTeach program, now based at ODU, the selection of the university will be made through a competitive RFP process.

Recommendation:

2. Initiate a scholarship program through which high school teachers with teaching endorsements in stipulated areas relevant to STEM-H college disciplines and who are teaching STEM-H subjects, including CTE, can apply through their school divisions for reimbursement of tuition and fees for university courses identified by the community college as relevant to the STEM-H teaching discipline for which the teacher is attempting to become credentialed to teach college classes.

How It Works:

VDOE will provide guidelines for distribution and priority of scholarships so as to align with those academic disciplines and school divisions with the most critical shortages of teachers with appropriate qualifications to instruct dual-enrollment or AP courses. Local community colleges will be asked to advise the review process for teacher applicants for scholarships to ensure planned coursework is appropriate to the goal of developing more dual-enrollment teachers and selected applicants are individuals with academic transcripts appropriate to the goal of college teaching.

Players: The key players for this action item would include: Virginia Department of Education, Virginia Community Colleges, Old Dominion University and other higher education institutions offering teacher preparation programs

Case Studies:

The UTeach Institute partners with 35 universities in 17 states. To date, the original program at University of Texas at Austin, has graduated more than 800 STEM teachers. Other universities across the country have produced an additional 800 alumni. Graduates of these programs are projected to teach over 4.8 million secondary students by 2020. Current information and outcomes of UTeach programs are available at http://uteach-institute.org.

Action Item #3: Sustain and expand the use in policy and budget planning of an annual Report Card on Virginia's Workforce System

Problem:

Workforce development programs span nine state agencies and encompass a significant number of federal programs - each with different rules, regulations, funding streams and target populations. Measuring the performance of such a complex system presents a significant challenge. To address this issue, as a part of Virginia Performs, and in collaboration with the nine agency Career Pathways Work Group supporting Virginia's Workforce Council, Virginia's Workforce System Report Card was created to bring together indicators across state agencies in the areas of STEM-H, college and career readiness, postsecondary education, secondary education, and employment and business development. With a special section devoted to manufacturing and plans in the future to expand that section to incorporate other targeted

industry sectors, the report card recognizes the need of critical industries for workers with the right credentials and skills.

Recommendation:

Virginia's Workforce System Report Card should continue to be produced on a regularly scheduled basis and continually refined and updated with new measures and data as available. Virginia's Workforce System Report Card in conjunction with other workforce data resources should be used to facilitate thoughtful and focused discussion on workforce priorities among government, policy, and education and workforce system leaders. The Report Card should inform the annual work plan of the Virginia Workforce Council.

How It Works:

The recommendation related to Virginia's Workforce System Report Card would be carried out by:

• Using strategic partners, such as the Virginia Workforce Council, the Council's Career Pathways System Workgroup, and relevant stakeholder organizations to explore new measures and industry focus areas, and to refine existing measures annually. The Council on Virginia's Future will continue to produce the report card.

By far the more significant piece of this recommendation is related to strategy development around key indicators. It would be carried out by:

 Presenting opportunities for discussion, additional research, and eventual action based on data from Virginia's Workforce System Report Card and other data tools. Each year this should guide the work of the Virginia Workforce Council at the committee level. The Virginia Community College System, as staff to the Virginia Workforce Council, will develop an approach to integrating strategy development around key metrics and outcomes.

Key Players:

The key players for this action item would include: Governor's Director of Education and Workforce Development, Council on Virginia's Future, The Virginia Workforce Council, and Virginia's Career Pathways Workgroup

Case Studies:

A number of states with strong reputations for workforce development and workforce policy use annual scorecards to guide analysis and decision making by their state Workforce Investment Boards (WIBs) and other major stakeholders in education and workforce development. These include: Washington, Kentucky, Oregon, Massachusetts and Maryland.

Action Item #4: Conduct Public Awareness Campaign to Promote Middle Skills Jobs and the Career Readiness Certificate (CRC)

Problem:

Virginia, like other states, faces an increasing skills gap in middle skills jobs—those requiring more than a high school education but less than a bachelor's degree. Middle skills jobs are often

accessible through certifications, licensures, and apprenticeship credentials as well as community college certificates and degrees. The nature of America's skills gap was recently addressed in State Sector Strategies Coming of Age: Implications for State Workforce Policy Makers, a report jointly produced by the National Governors Association Center for Best Practices and the National Skills Coalition. Closer to home, the Boston Consulting Group report Developing an Advanced Manufacturing Workforce for Virginia's Tobacco Region underscored a pending "skills gap" in middle skills jobs with a projected 1,045 manufacturing jobs in the Tobacco Region to be left unfilled by 2017, due to a shortage of trained and prepared workers for these jobs. The Boston Consulting Report states in order for the Tobacco Commission Region to address current and future workforce needs for "middle skills" technicians and trades workers a focus must be placed on attracting individuals to pursue careers in manufacturing. Other industry sectors, such as energy and health care, report a similar challenge in attracting applicants with the work and career readiness skills to pass pre-employment examinations required by the hiring process. But in no occupational sector is the impending skills shortage more acute than in skilled trades—welders, electricians, machinists—the "most in-demand group of workers" in America, according to Forbes. Whereas 44 percent of all workers in the U.S. are 45 or older, 53 percent of skilled trade workers fall into that age bracket with nearly 20 percent of all trade workers over the age of 55.

With businesses looking to a need to replace skilled trade workers, it is of great concern in Virginia there are fewer high school students completing CTE programs in the manufacturing cluster than in all but one other of the 16 national career clusters adopted by Virginia's school systems. Whereas business management and administration programs in school divisions across the state produce 5,177 CTE program completers a year and marketing programs 3,873, statewide, high school manufacturing programs produced only 828 CTE completers in 2011-12. It should be noted, however, the number of completers in manufacturing in recent years has increased with statewide gains of about 100 manufacturing program completers per year.

The Career Readiness Certificate (CRC), awarded by the Commonwealth of Virginia and ACT, provides a certification of work readiness for the technology sectors most in need of "middle skills" employees. The CRC program provides not only an assessment of core workforce skills but maps those skills to specific occupations in specific industries. In order to move forward business and industry recognition of the certification, thus increasing its value to job seekers and employers alike, information available to business and industry about the CRC needs to be expanded and enhanced. In addition, there is a need to better inform industry as to Virginia's production of emerging workers and the value of job seekers with certifications, including the CRC, and thereby better connect industry with available resources and manpower.

Recommendation:

Calling the attention of communities, schools, parents, and students to the skills gap in "middle skills" jobs and the career opportunities afforded young people who are hard working and ready to move into the industries that most need them demands a public relations campaign. Additionally, by improving the telling of its own workforce story--the Commonwealth's efforts and successes in developing and expanding a pipeline of "middle skills" technicians—Virginia can enhance its attractiveness to businesses and industries seeking to relocate, start a new venture or expand operations. There is also an opportunity to promote career pathways—including those providing industry recognized certifications—into these "middle skills" jobs beginning with the advantages of earning a CRC.

How It Works:

Develop a Request for Proposal (RFP) and select vendor to develop a plan, a brand, and materials for a public information and marketing campaign to be specifically targeted to expanding the pipeline of future workers preparing for "middle skills" jobs, such as skilled trades, where there is demonstrated evidence of a skills gap in both the industry sector and rural region(s). The public relations campaign should focus on careers while providing information and referrals to education, training and employment resources to connect to featured career fields and industries, and the campaign should build on current work being done in this area, such as Virginia Manufacturers Association's Dream It, Do It activities and materials, VDOE's R U Ready publications, Virginia Education Wizard and other efforts. Funds for this effort should be supplemented by private donations from business and industry stakeholders.

Key Players:

The key players for this action item would be: Virginia's Career Pathways Work Group and the Virginia Workforce Council

Case Studies:

A number of states have launched major workforce initiatives that were the focus of ambitious public relations campaigns. Some have directly focused these efforts on driving their message (and their public workforce programs) to the skills gap in "middle skills" jobs, and some states have launched statewide campaigns to promote the Career Readiness Certificate (CRC) as a starting point for entering "middle skills" jobs. To date, there is limited data on the impact of these statewide marketing campaigns on outcomes in education or employment.

In Virginia, Race to the GED, launched as a Governor's initiative in 2003, was a successful statewide public relations campaign including various forms of advertising. During the course of the campaign, academic years 2003-04 to 2008-09, the Commonwealth saw an increase of 50 percent of GED passers as compared to pre-campaign years. The success of that campaign is supportive of the premise that a similarly ambitious campaign, targeted to expanding enrollment in education and training "pipelines" to middle skills jobs could have impact on participant enrollment and behaviors.

Action Item #5: Expand regional solutions for addressing the skills gap in targeted industry sectors

Problem:

Even as some regions in rural Virginia are challenged with the highest levels of unemployment in the state, many employers in key sectors have good paying positions that remain unfilled because of the disconnect in demonstrated skills sets of applicants and the requirements of available jobs. Seeking to address this skills gap is the goal of several regional initiatives throughout rural Virginia that have sprung up in recent years. These include career pathways in manufacturing and energy in the Blue Ridge and Southwest regions, respectively, and the Southern Virginia Work Ready Community initiative, led by the Dan River Regional Collaborative with a Steering Committee representing local Workforce Investment Boards (WIBs), Chambers of Commerce, and regional foundations and non-profit organizations.

Recommendation:

The Virginia Workforce Council (VWC) and the Governor's Office will evaluate the Southern Virginia Work Ready Community Initiative

How It Works:

To meet the challenge of helping employers assess applicant skills sets to job requirements and helping job seekers develop and demonstrate "work ready" skills in demand by employers, the Dan River Collaborative has launched a Southern Virginia Work Ready Community Initiative that is driving the number of incumbent, transitional, and emerging workers (or high school students) who attain the National Career Readiness Certificate (NCRC Plus). The NCRC Plus is an industry recognized, portable credential that certifies essential skills for success in the workplace including: Applied Mathematics, Locating Information, Reading for Information, and the "soft skills" of dependability, tolerance, attitude, interpersonal skills, perseverance, persuasion, and problem solving. The NCRC has also been mapped against job requirements for specific occupations—especially "middle skills" jobs—in key industries, so that the NCRC can be used to align foundational skills sets of job seekers and available job positions.

In addition to driving National Career Readiness Certificate Plus (NCRC Plus) attainment by emerging, incumbent and displaced workers, the Dan River Regional Collaborative hopes that its Work Ready Communities initiative will help regional leaders and economic developers tell a better story about workforce development in the region: a story about skills sets and a community's collaborative attempt to increase those skills sets. The potential of the Work Ready Communities initiative to create a specifically rural Virginia story of workforce development is a consideration appropriate to the VWC, with its members well versed in the NCRC and Work Ready Communities.

Additionally, while the Dan River Regional Collaborative has only identified two indicators of work readiness for the Southern Virginia region—NCRC attainment levels by targeted workforce populations and use of NCRC by regional employers—local WIBs and training providers are adopting a practice of using the NCRC as a first step in career pathways to occupationally specific credentials and entry into the skilled workforce. The VWC may choose to consider the impact of CRC attainment on entry into occupationally specific training and certification attainment beyond the CRC in considering the issue of expansion, as well as other participant and community outcomes.

Key Players:

The key players for this action item would include: Virginia Workforce Council, Dan River Regional Collaborative, and Virginia Community College System in the VCCS's role as state administrator of the CRC.

Case Studies

ACT has produced a number of case studies on the impact of Work Ready Communities. Until recently, evidence of the success of these initiatives has been limited to increased NCRC attainment levels in targeted populations and increased use of Work Keys job profiling with some anecdotal evidence of improvements in employer satisfaction levels and job placement rates. However, a recent report of the Southwest Missouri Workforce Investment Board on Average Earnings, Employment, and Retention by National Career Readiness Certificate and Education Levels provides quantifiable data on the impact of NCRC attainment by adult participants in that region's workforce programs on such participant outcomes as average

earnings, entered employment, and retention in employment. An additional recent research report on the impact of CRC attainment on displaced manufacturing workers in Ohio suggests a positive relationship between CRC attainment and pursuit and completion of occupational specific, industry recognized certifications.

Action Item #6: Guarantee that Virginians Served through CTE and Workforce Programs Have Opportunities to Improve and Demonstrate Work and Career Readiness

Problem:

Virginia took a big jump forward in prioritizing the work readiness of future high school graduates who earn standard diplomas when a Governor McDonnell proposed education initiative in 2012 (HB 1061/SB 489) was passed by the General Assembly and signed into law. The new law, effective with the entering high school class of fall 2013, requires all high school graduates earning a standard diploma to earn a state approved workforce credential in order to graduate. Since 2009, the Board of Education has approved over 281 industry recognized certifications, licensures, and other national and state assessments including the VDOE developed Work Readiness Skills assessment and the CRC. Any one of these 281 approved credentials will now serve to meet the new graduation requirement. Over 35,946 high school graduates earned standard diplomas in 2012 or 41.13 percent of the Commonwealth's high school graduates, suggesting the scope of impact of the new law on Virginia's emerging workforce and the school divisions preparing these students.

As school divisions across the Commonwealth prepare to implement HB 1061, nearly 200,000 adults looking for work in the Commonwealth have an equally critical need to demonstrate work and career readiness—basic applied academic skills and occupationally specific skills—to potential employers. HB 1061/SB 489 prioritizes demonstration of work or career readiness by targeted high school populations, but there is no correlating policy requirement that would apply to the displaced and adult workers served by the 14 federally funded programs under the umbrella of Virginia's Workforce Network. The need to demonstrate proficiency in work and career readiness to employers may be most acute for adults without postsecondary education credentials and young adults without much work experience.

Recommendation:

Require publicly-funded workforce programs to prepare plans for how each program will provide participants with an opportunity to attain a credential of work or career readiness

How It Works:

As previously described, the CRC provides a national credential of work readiness; however, for some occupations and some populations of youth and adults, other demonstrations of work readiness may be appropriate and acceptable. For example, the Virginia Employment Commission's Trade Act Adjustment program has collaborated with the VDOE Office of Adult Education and Literacy and with Virginia Commonwealth University to develop a holistic sixmonth training program--commonly called Pre-PluggedIn VA—that affords trade impacted, displaced workers who test at a 5th to 9th grade reading level with a six-month individualized course of instruction that includes basic skills, GED test preparation, CRC preparation, digital literacy skills, and "soft skills." To allow for demonstration of specific workplace competencies that are aligned with available jobs for this adult population that may not rapidly qualify to earn a CRC but needs to almost immediately return to work, program developers have implemented a

stepping stone approach in terms of credential attainment, following a model developed by Purdue University and Mozilla. The system confers badges that each attest to a demonstrated competency or competencies in occupationally specific skills and in "soft skills." Each of the badges is the result of agreement between education and training providers and employers. Another example of a way in which work readiness credentials might be obtained is formal on the job training programs—from registered apprenticeships to structured internships and cooperative education—that provide evidence of work and career readiness through the nationally recognized apprenticeship credential or through project-based portfolios or structured performance evaluations.

The Governor's workforce initiative to further strengthen the Virginia Workforce Council, HB 2154/SB 1177 (2013 Session) calls for the VWC to "review and recommend industry credentials that align with high demand occupations." With this in mind, the Virginia Workforce Council, assisted by the nine agency represented Career Pathways Work Group, is charged with reviewing proposed guidelines to be submitted to the VWC by the Career Pathways Work Group for providing participants of targeted programs within Virginia's workforce system with a credential or other approved demonstration of work or career readiness skills.

Key Players:

The key players for this action item would include: Virginia Workforce Council and Career Pathways Work Group in their role of providing cross-agency staffing support to the Council.

Case Studies

Virginia's vision of its workforce system is singularly ambitious in its incorporation and integration of CTE education at all levels as well as more than 20 state and federally funded workforce development programs. Whereas this subcommittee is recommending a strategy that would cross agencies and programs with responsibilities for workforce development, currently available national case studies and data on the impact of work ready credentials, such as the CRC, are often limited to participants in only WIA programs or a small cluster of workforce programs and, often, these studies delineate impact on a single region rather than a state or multiple regions within a state. Such evidence as exists to support the impact of CRC attainment on entry into employment and higher level credential attainment has been previously cited.